

DEC 04 2006

Appl. No. 10/611,315
Amdt. Dated December 4, 2006
Reply to Office Action of August 2, 2006

Attorney Docket No. 83394.0008
Customer No.: 26021

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A micro controller, comprising a CPU, performing processing in accordance with a program,
said micro controller further comprising:
a memory, storing: compressed codes, resulting from the conversion of ~~program original~~ codes into variable length codes,
an address conversion information, specifying the head address of each group of grouped ~~program compressed~~ codes of variable lengths; and
a compressed code type information, specifying, according to each group, the code length of each compressed code of variable lengths contained in each group; and
a compressed code processing part, specifying, from a code address output by the CPU, an address conversion information and compressed code type information to be referred, using the specified address conversion information and the compressed code type information to determine the corresponding compressed code address, and reading the corresponding compressed code.
2. (Original) The micro controller as set forth in Claim 1, wherein
the memory furthermore stores dictionary information for decompressing compressed codes into the original codes and
the compressed code processing part refers the dictionary information to decompress the compressed code, which has been read, into the original code.

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3. (Original) The micro controller as set forth in Claim 1, wherein
said compressed code processing part stores information for identifying
the area in said memory in which compressed codes are stored, the area in said
memory in which the address conversion information are stored, and the area in
which the compressed code type information are stored.

4. (Currently amended) The micro controller as set forth in Claim 3, wherein
said memory stores said address conversion information in the order of
blocks of ~~program~~ original codes, and
to store said compressed code type information in the order of the
~~program~~ original codes.

5. (Original) The micro controller as set forth in Claim 2, wherein
said dictionary information are stored in areas that are divided
according to the code lengths of the corresponding compressed codes, and in each
area, said dictionary information are stored in the order of the codes of said
corresponding compressed codes.

6. (Original) The micro controller as set forth in Claim 5, wherein
said compressed code processing part specifies, from the compressed
code type information, the area in which the dictionary information to be referred is
stored, and, based on the compressed code, specifies the dictionary information to be
referred that is contained in the specified area.

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7. (Original) The micro controller as set forth in Claim 1, wherein
said compressed code processing part reads, from said memory and
prior to reading a compressed code, a compressed code set, having a predetermined
size and containing the compressed code to be read,

said micro controller is equipped with areas, respectively storing
temporarily the address conversion information, the compressed code type
information, and the compressed code set that were used just immediately before,
to use the address conversion information and the compressed code
type information that are stored temporarily in said areas in a case where the code
address output by the CPU is contained in the same block as the compressed code
that was read just immediately before, and

to read the compressed code from the compressed code set that is
stored temporarily in said area in a case where the compressed code corresponding
to the code address output by the CPU is contained in the compressed code set that
was read just immediately before.

8. (Currently amended) The micro controller as set forth in Claim 1, wherein
said compressed code contains the same code program as the original
code.